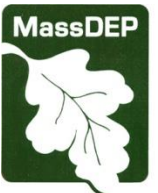


Remote Telemetry for Active Exposure Pathway Mitigation Measures

**Waste Site Cleanup Advisory Committee Meeting
Thursday, May 24, 2018**

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Remote Telemetry Registrations – Status of Registered Systems – May 2018

229 devices (100 RTNs) have completed the initial online registration step.

- 190 devices are completely registered (shutdown/restart transmitted in an acceptable format)
- 28 devices – working on formatting changes/haven't yet conducted shutdown restart tests/shutdown only
- 11 devices – Telemetry is no longer required per LSP

Online registration on “new” website



Challenges with Current Telemetry Operations & Regulations

- MassDEP doesn't receive notifications when cellular/internet/telemetry service is stopped
 - Current owner can discontinue service
- MassDEP can be removed from notification list after registration
- “significant disruption of the effectiveness of the system” not defined in regulations
- Difficult to interpret some messages



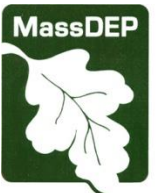
Proposed Amendments

- Revised definition of an AEPMM
- Registration process outlined with shutdown/restart test
- Clarify Remedial Monitoring Reports (RMRs) are required for AEPMMs except for PS
- Add periodic shutdown/restart test after PSC upon the Department's request
- Notifications should be based on vacuum measurements as defined in the operating regimen
- Placeholder for new telemetry method



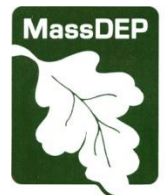
Current Provision

40.1025(3)(d) – An Active Exposure Pathway Mitigation Measure implemented as part of a Permanent Solution with Conditions shall employ remote monitoring technology that will alert the owner and operator of the building protected by the Active Exposure Pathway Mitigation Measure and the Department upon failure of the system, such as loss of power, mechanical failure or other significant disruption of the effectiveness of the system.



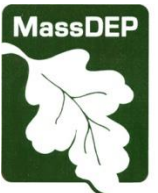
Proposed Amendment

40.1025(d) – An Active Exposure Pathway Mitigation Measure implemented as part of a Permanent Solution with Conditions shall employ remote monitoring technology that will alert the owner and operator of the building protected by the Active Exposure Pathway Mitigation Measure and the Department **when the vacuum level is outside the acceptable range and when the vacuum level returns within the acceptable range.**
~~upon failure of the system, such as loss of power, mechanical failure or other significant disruption of the effectiveness of the system.~~



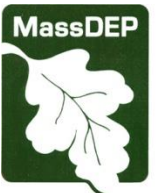
Possible New Telemetry Method

- Continuous vacuum monitoring
- Continuous data stream transmitted to MassDEP server (hourly?, daily?)
- Historical data available
- Data available to MassDEP in a more functional format as well accessible to public

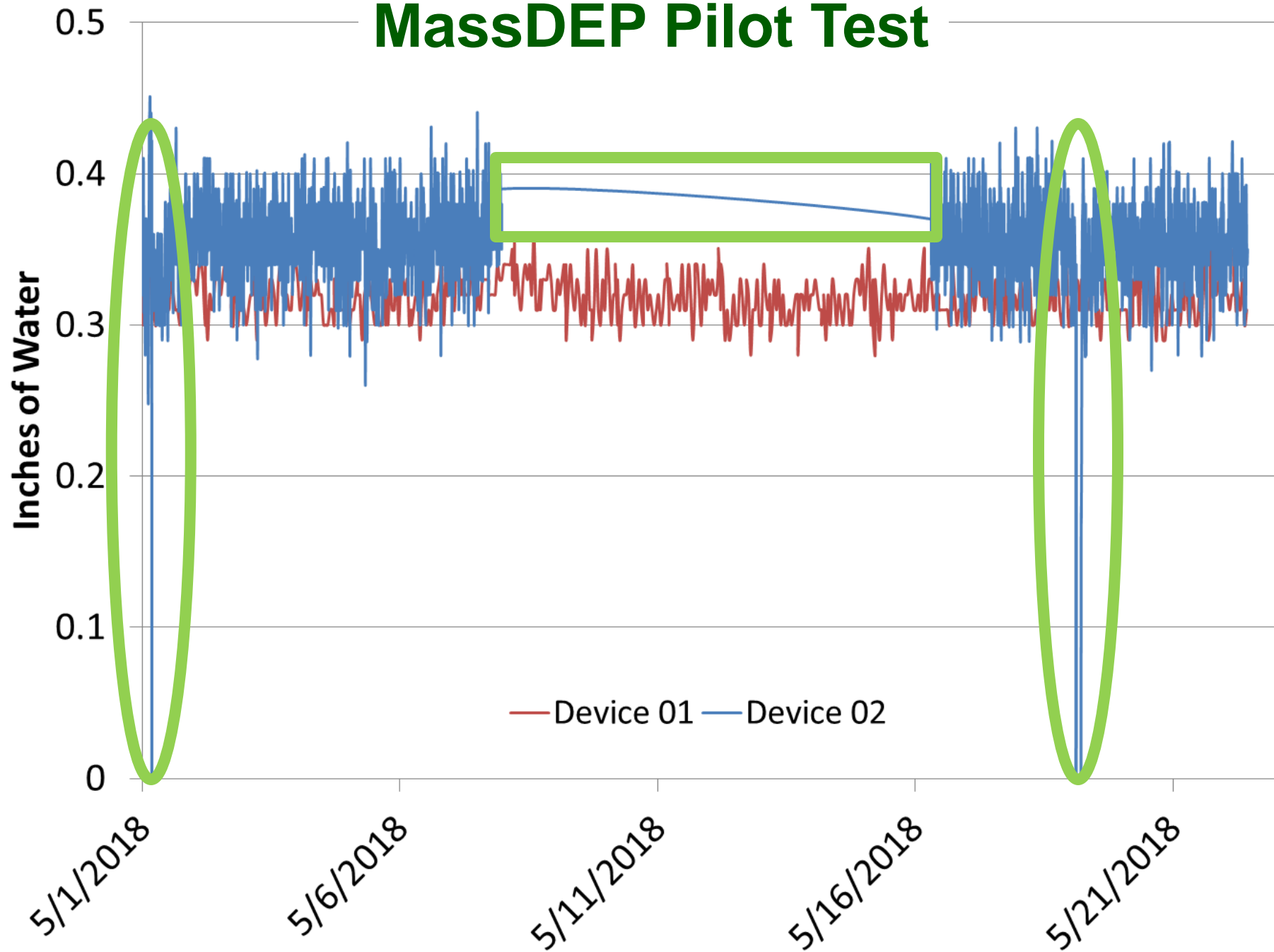


Advantages of New Method

- More confidence in remote telemetry
 - Constant feed of data will indicate if telemetry is canceled
 - Less DEP staff resources required
- Continuous data feed replaces notifications
- Eliminates extraneous notifications
- Possible reduction in:
 - RMRs
 - Status Reports
 - Annual shutdown/restart test



MassDEP Pilot Test



Questions?

